

WHAT IS CLAIMED IS:

1. A light emitting element comprising at least one organic layer which includes a light emitting layer, and which is disposed between a pair of electrodes, wherein at least one layer of the at least one organic layer contains at least one compound consisting essentially of carbon, fluorine and nitrogen.
2. The light emitting element of claim 1, wherein the compound contains hydrogen atoms in an amount not greater than two hydrogen atoms per six carbon atoms.
3. The light emitting element of claim 1, wherein the compound consisting essentially of carbon, fluorine and nitrogen is a compound represented by the following general formula (A):

General formula (A)

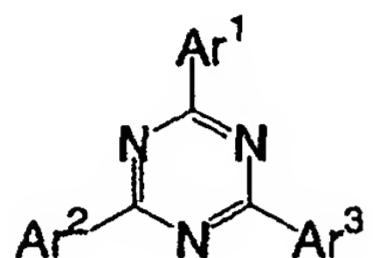
$X - (R)n$

wherein in general formula (A), X represents an aromatic ring group or a hetero cyclic ring group, which have atoms selected from the group consisting of carbon, fluorine and nitrogen; R represents a group consisting of carbon and fluorine, or a group consisting of carbon, fluorine and nitrogen; n represents an integer of 1 or more; and when X contains no nitrogen, at least one R contains at least one nitrogen.

4. The light emitting element of claim 3, wherein X further represents a single ring or a condensed ring.

5. The light emitting element of claim 1, wherein the compound consisting essentially of carbon, fluorine and nitrogen is a compound represented by the following general formula (I):

General formula (I)



wherein in general formula (I), each of Ar<sup>1</sup>, Ar<sup>2</sup> and Ar<sup>3</sup> represents an aryl group consisting of carbon and fluorine.

6. The light emitting element of claim 5, wherein each of Ar<sup>1</sup>, Ar<sup>2</sup> and Ar<sup>3</sup> in the general formula (I) is selected from the group consisting of a perfluorophenyl group, a perfluorobiphenyl group, a perfluoronaphthyl group, a perfluoroanthracenyl group, a perfluorophenanthryl group, a perfluoropyrenyl group, a perfluoronaphthacenyl group and a perfluoroperylenyl group.

7. The light emitting element of claim 1, wherein the compound has a glass transition temperature in a range of 130°C to 400°C.

8. The light emitting element of claim 1, wherein light emission from an excited triplet state is utilized.

9. The light emitting element of claim 8, wherein when light emission from an excited triplet state is utilized, the compound has a minimum excitation triplet energy level of 65 kcal/mol (272.35 kJ/mol) to 95 kcal/mol (398.05 kJ/mol).

10. The light emitting element of claim 1, wherein the compound is used as an electron transporting material.

11. The light emitting element of claim 10, wherein the compound, which is used as an electron transporting material, is contained in an amount of 60 to 100% by mass in an organic layer containing the electron transporting material.

12. The light emitting element of claim 1, wherein the compound is used as a host material in a layer containing a light emitting material.

13. The light emitting element of claim 12, wherein the compound, which is used as a host material, is contained in an amount of 50 to 99.9% by mass in an organic layer containing the host material.

14. The light emitting element of claim 1, wherein the at least one organic layer contains a phosphorescent material.

15. The light emitting element of claim 14, wherein the phosphorescent material is a transition metal complex.

16. The light emitting element of claim 15, wherein the transition metal complex is selected from the group consisting of an iridium complex, a platinum complex, a rhenium complex and a ruthenium complex.

17. The light emitting element of claim 16, wherein the transition metal complex is an iridium complex.

18. The light emitting element of claim 1, wherein the at least one organic layer is formed by a resistance heating vapor deposition method, a coating method or a transferring method.

19. The light emitting element of claim 1, wherein the light emitting layer is formed by a coating method.